

**IN THE SPECIFICATION:**

Please amend the following portions of the specification as follows:

Please amend the title of the application as follows:

**CATALYSTS USED FOR OLEFINE OLEFIN POLYMERIZATION  
AND THE PREPARATION THEREOF:**

Please amend the paragraph stating on page 1, line 7 and ending on page 1, line 9 as follows:

The present invention relates to a catalyst used for olefine polymerization and the preparation thereof. The present invention also relates to a method of polymerizing olefines olefins by using the catalyst of the present invention.

Please amend the paragraphs stating on page 1, line 12 and ending on page 1, line 30 as follows:

Polyolefines Polyolefins is are a very important category of polymeric materials. Half of the plastics are polyolefine polyolefin. They are widely used in industry, agriculture, national defense, communication, transportation and human daily life. Olefines Olefins can be polymerized to form macromolecular compounds called polyolefines polyolefins by using a catalyst. Therefore, catalyst is a key to the development of polyolefine polyolefin industry which plays a very important role in controlling the structures and properties of polyolefines polyolefins.

Although the conventional Ziegler-Natta catalysts are still widely used in the industrial production of polyolefines polyolefins, they are not good catalysts for the manufacture of linear low-density polyethylenes (LLDPE). Recently, it was found that zirconocene, a representative of the metallocene catalysts, possesses very high catalytic activity to copolymerize olefines olefins and can be used for the production of LLDPE. However, an  $\alpha$ -olefine  $\alpha$ -olefin (such as butene-1, hexene-1, octene-1, and the like) as the second monomer is required by using metallocene to catalyze the polymerization of olefine olefin for the production of LLDPE, which complicated the process of polymerization. In 1996, Johnson in Du Pont Co. disclosed that  $\alpha$ -diimino nickel(II) could be used as an olefine olefin polymerization catalyst (see WO 96/23010). With the action of a co-catalyst of methyl aluminoxane (MAO) or modified methyl aluminoxane (MMAO), it is possible to homopolymerize ethylene. By controlling the polymerization conditions, it is possible to

obtain polyethylene (PE) including LLDPE with high molecular weight, low density and desired degree of branching.

Please amend the paragraphs stating on page 1, line 33 and ending on page 2, line 2 as follows:

It is an object of the present invention to provide a catalyst used for ~~olefine~~  
olefin polymerization which is a polynuclear  $\alpha$ -diimino Ni(II). The precursor of this catalyst is a polynuclear  $\alpha$ -diimino Ni(II) complex. The polynuclear $\alpha$ -diimine Ni(II) complex can be activated by a neutral Lewis ~~acids~~ acid such as MAO, MMAO, which then catalyze the polymerization of ethylene into high molecular weight branched polymeric materials.